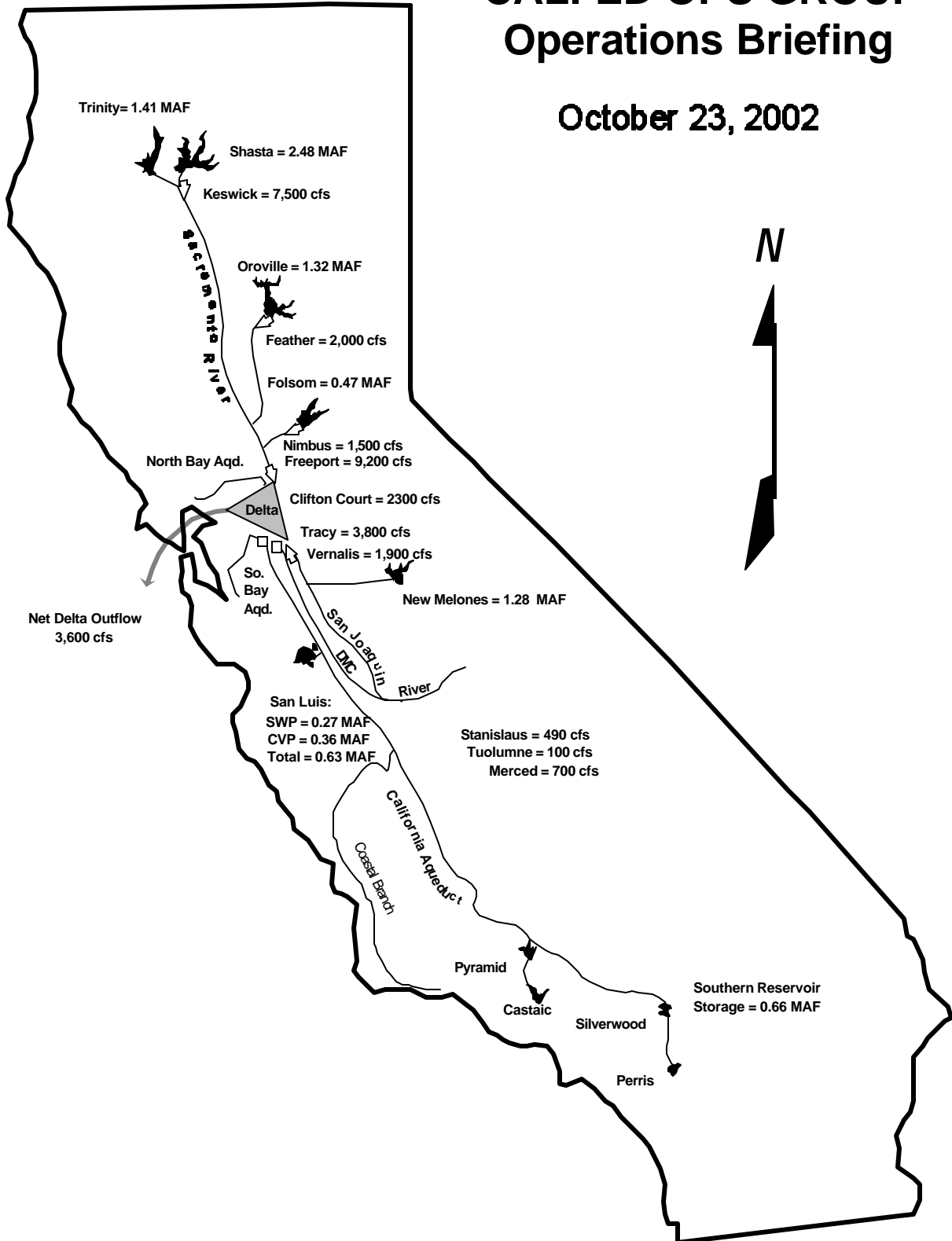


# CALFED OPS GROUP Operations Briefing

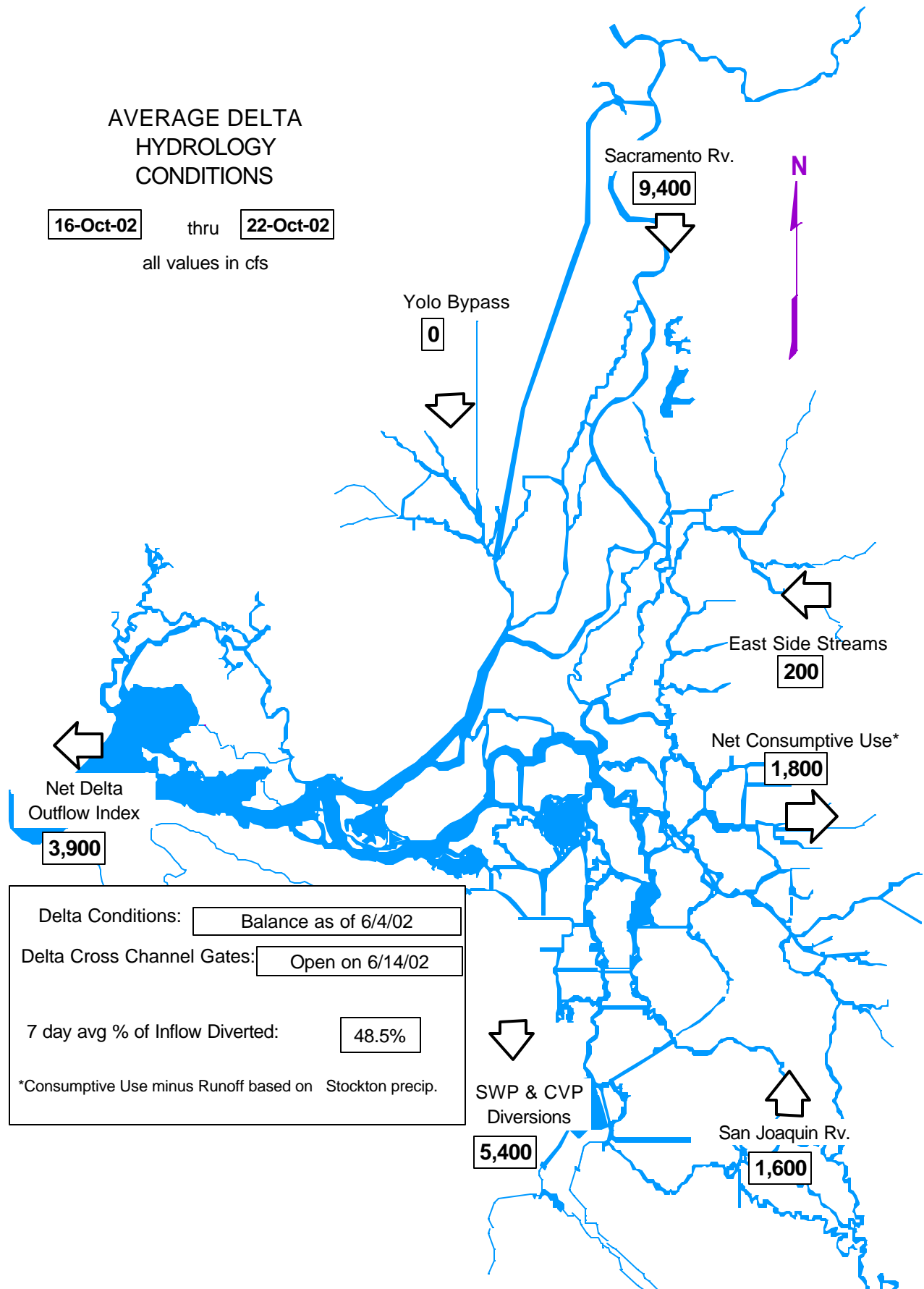
October 23, 2002



AVERAGE DELTA  
HYDROLOGY  
CONDITIONS

16-Oct-02 thru 22-Oct-02

all values in cfs



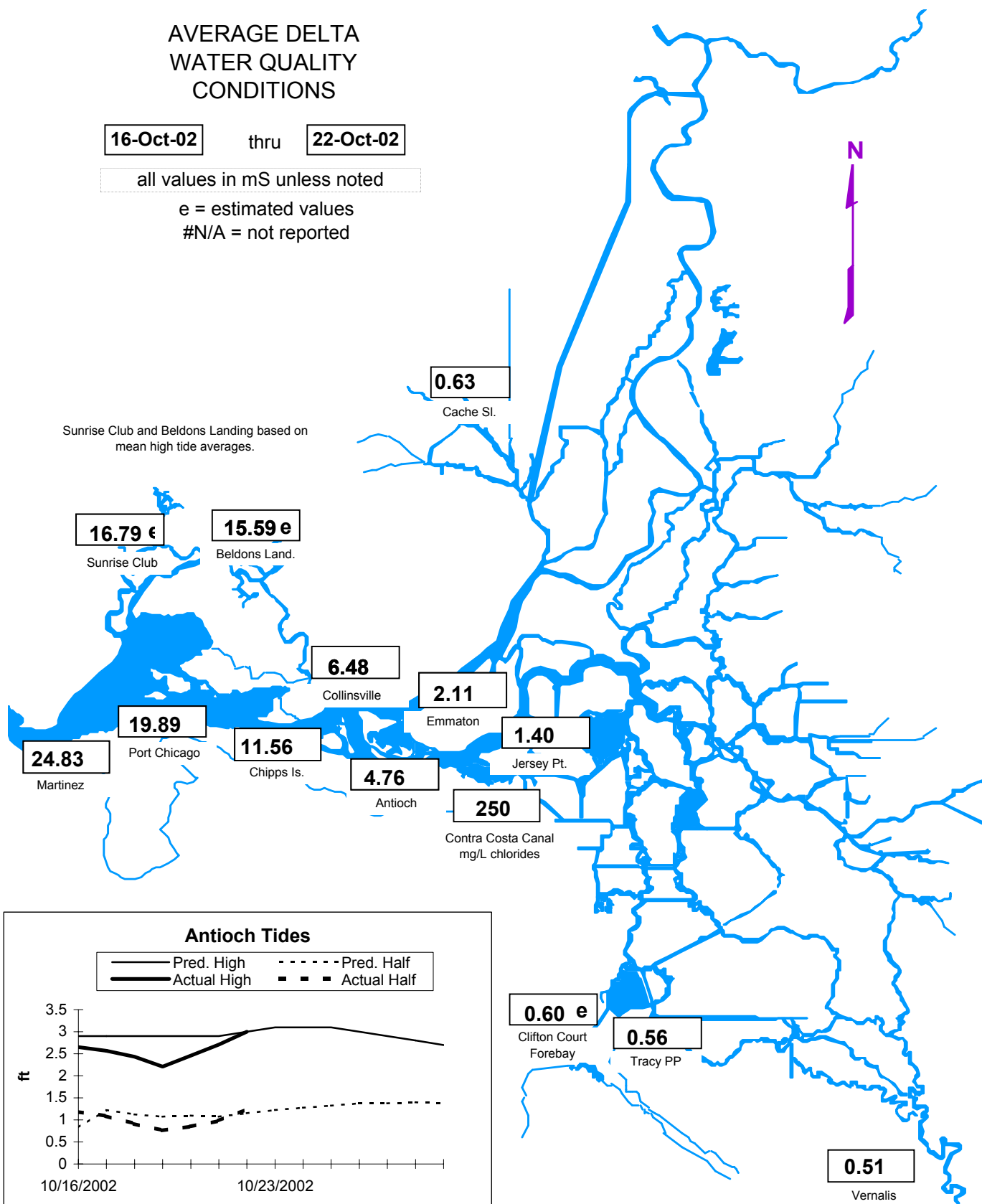
# AVERAGE DELTA WATER QUALITY CONDITIONS

**16-Oct-02** thru **22-Oct-02**

all values in mS unless noted

e = estimated values

#N/A = not reported



**DRAFT**

# Bay-Delta Standards

Contained in D-1641

**DRAFT**

| CRITERIA | Oct 02 | Nov 02 | Dec 02 |
|----------|--------|--------|--------|
|----------|--------|--------|--------|

## FLOW/OPERATIONAL

|  |                              |             |          |
|--|------------------------------|-------------|----------|
| <ul style="list-style-type: none"> <li>Fish and Wildlife</li> <li>SWP/CVP Export Limits</li> <li>Export/Inflow Ratio</li> <li>Minimum Outflow - mon.</li> <li>- 7 day avg.</li> <li>Striped Bass Survival</li> <li>Suisun Marsh</li> <li>Habitat Protection Outflow, X2</li> <li>River Flows:</li> <li>@ Rio Vista - min. mon. avg.</li> <li>- 7 day average</li> <li>@ Vernalis: Base -min. mon. avg.</li> <li>- 7 day average</li> <li>Pulse</li> <li>Delta Cross Channel Gates</li> </ul> |                              |             |          |
|  | 65%                          |             |          |
|  | 4000 cfs                     | 4500 cfs    | 4500 cfs |
|  | 3000 cfs                     | 3500 cfs    | 3500 cfs |
|  |                              |             |          |
|  | 4000 cfs                     | 4500 cfs    | 4500 cfs |
|  | 3000 cfs                     | 3500 cfs    | 3500 cfs |
|  |                              |             |          |
|  | *1000 cfs                    |             |          |
|  | * Up to an additional 28 TAF | Conditional |          |

## WATER QUALITY STANDARDS

|   |                                     |            |  |
|---|-------------------------------------|------------|--|
| <ul style="list-style-type: none"> <li>Municipal and Industrial</li> <li>All Export Locations</li> <li>Contra Costa Canal</li> <li>Agriculture</li> <li>Western/Interior Delta</li> <li>Fish and Wildlife</li> <li>San Joaquin River Salinity</li> <li>Suisun Marsh Salinity</li> </ul> |                                     |            |  |
|   | <= 250 mg/l Cl                      |            |  |
|   | <= 150 mg/l for 240 days            |            |  |
|   | 30-day running average EC <= 1.0 mS |            |  |
|   |                                     |            |  |
|   | 19 mS/cm                            | 15.5 mS/cm |  |

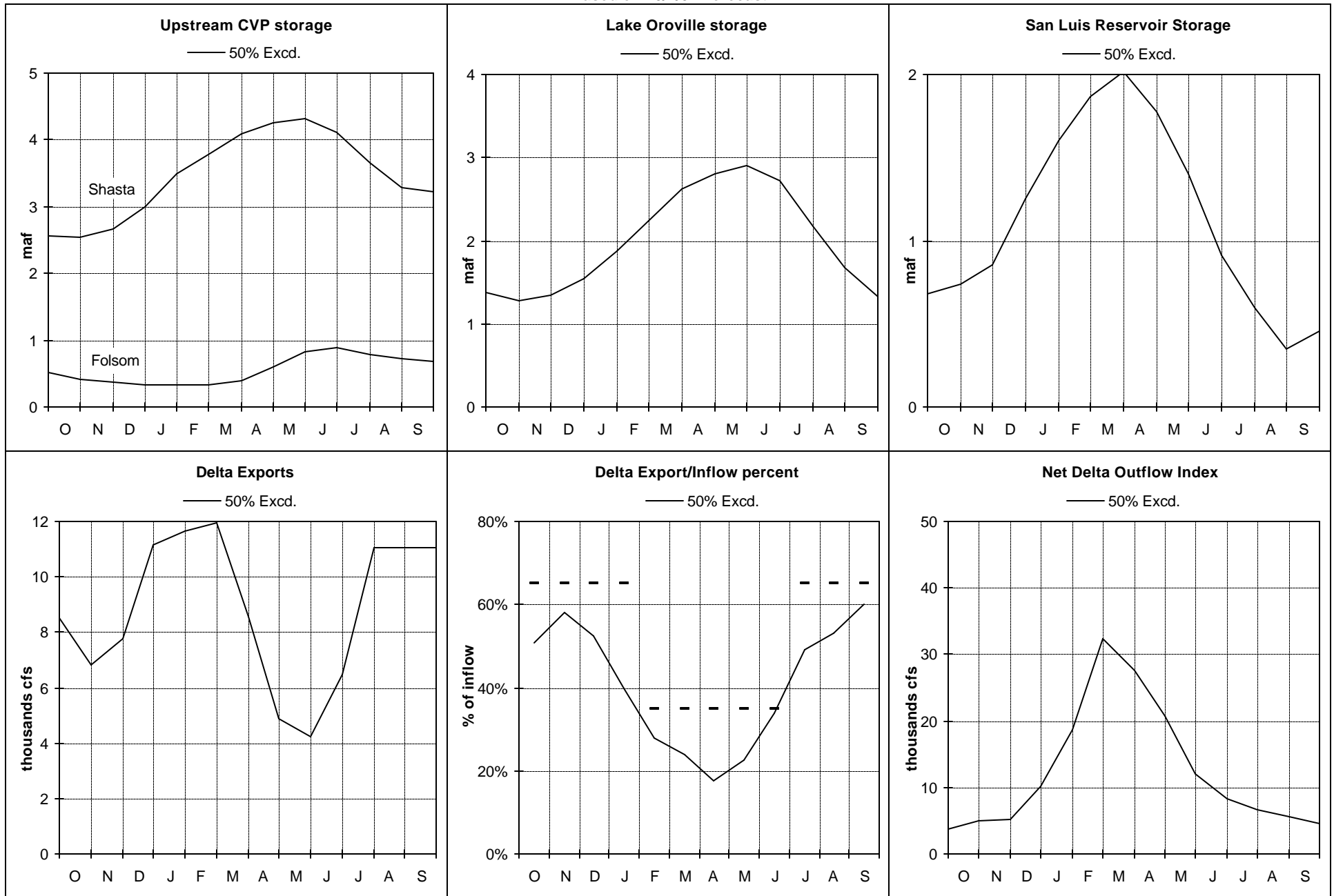
### Water Year Classification: (May 1 forecast)

SRI (40-30-30 @ 50%) =6.5 (Dry)

SJV (60-20-20 @75%) = 2.3 (Dry)

# SWP & CVP WY 2003 Forecasted Operations.

Based on 10/1/02 Forecast



Flows are monthly averages.

WY 2001/2002 EWA Accounting Summary  
Based on October 1 -- 90% Exceedence Hydrology

| EWA NOD and SOD Storage |     |     |     |     |     |     |     |     |     |     |     |     |      |     |     |      |       |
|-------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|------|-------|
| 1                       | C/O | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep  | Oct | Nov | Dec  | Total |
| NOD °                   | 45  |     |     |     |     |     |     |     |     |     |     |     |      |     |     |      |       |
| YCWA                    |     |     |     |     |     |     |     |     |     | 15  | 60  | 54  | 5    |     |     |      | 135   |
| SGA                     |     |     |     |     |     |     |     |     |     | 0.4 | 1.2 | 1.6 | 1.5  | 2.0 |     |      | 7     |
| CVP/SWP Reservoirs      |     |     |     |     |     |     |     |     |     |     |     |     | 20 * |     |     |      | 20    |
| SOD                     |     |     |     |     |     |     |     |     |     |     |     |     |      |     |     | 37 7 | 37    |

| EWA Asset Acquisition in SWP San Luis <sup>1</sup> |     |                 |                 |                 |     |     |                  |                   |     |                 |                  |                  |                 |     |     |     |       |
|--|-----|-----------------|-----------------|-----------------|-----|-----|------------------|-------------------|-----|-----------------|------------------|------------------|-----------------|-----|-----|-----|-------|
| 2  | C/O | Oct             | Nov             | Dec             | Jan | Feb | Mar              | Apr               | May | Jun             | Jul              | Aug              | Sep             | Oct | Nov | Dec | Total |
| E/I Relaxation                                     |     |                 | 3               |                 |     | 76  |                  |                   |     |                 |                  |                  |                 |     |     |     | 79    |
| EWA share of SWP gain                              |     | 3               |                 |                 |     |     |                  |                   |     |                 |                  |                  |                 |     |     |     | 3     |
| Project Pumping to reduce EWA debt                 |     |                 |                 |                 |     |     |                  |                   |     |                 |                  |                  |                 |     |     |     | 0     |
| JPOD using excess flows                            |     |                 |                 |                 |     |     |                  |                   |     |                 |                  |                  |                 |     |     |     | 0     |
| JPOD using NOD storage                             |     |                 |                 |                 |     |     |                  |                   |     |                 |                  |                  |                 |     |     |     | 0     |
| Xfer NOD - Sacramento River <sup>2</sup>           |     | 4 <sup>3</sup>  | 11 <sup>3</sup> |                 |     |     |                  |                   |     | 13 <sup>6</sup> |                  | 22 <sup>6</sup>  | 6 <sup>6</sup>  |     |     |     | 56    |
| Xfer NOD - San Joaquin River <sup>2</sup>          |     | 12 <sup>4</sup> | 11 <sup>4</sup> |                 |     |     |                  |                   |     |                 |                  |                  |                 |     |     |     | 23    |
| SOD SWP Surface/GW Purchases                       |     | 11 <sup>5</sup> | 9 <sup>5</sup>  | 12 <sup>5</sup> |     |     |                  |                   |     | 33 <sup>7</sup> | 15 <sup>7</sup>  |                  | 13 <sup>7</sup> |     |     |     | 93    |
| Exchange of EWA assets                             |     |                 |                 |                 |     |     | -9 <sup>14</sup> | -31 <sup>14</sup> |     |                 | 10 <sup>14</sup> | 10 <sup>14</sup> |                 |     |     |     | -20   |
| Groundwater pumping SOD                            |     |                 |                 |                 |     |     |                  |                   |     |                 |                  |                  |                 |     |     |     | 0     |
| Exchange from CVP to SWP in SL                     |     |                 |                 |                 |     |     |                  |                   |     |                 |                  |                  |                 |     |     |     | 0     |
| Total Monthly EWA Assets                           |     | 30              | 34              | 12              | 0   | 76  | -9               | -31               | 0   | 46              | 25               | 32               | 19              | 0   | 0   | 0   | 234   |

| EWA Asset Acquisition in CVP San Luis     |     |     |     |     |     |     |     |     |     |     |                   |                   |                  |                  |     |     |       |  |
|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------------------|-------------------|------------------|------------------|-----|-----|-------|--|
| 3   | C/O | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul               | Aug               | Sep              | Oct              | Nov | Dec | Total |  |
| E/I Relaxation                            |     |     |     |     |     |     |     |     |     |     |                   |                   |                  |                  |     |     | 0     |  |
| Project Pumping to reduce EWA debt        |     |     |     |     |     |     |     |     |     |     |                   |                   |                  |                  |     |     | 0     |  |
| JPOD using excess flows                   |     |     |     |     |     |     |     |     |     |     |                   |                   |                  |                  |     |     | 0     |  |
| JPOD using NOD storage                    |     |     |     |     |     |     |     |     |     |     | 43.8 <sup>6</sup> | 21.7 <sup>6</sup> | 0.6 <sup>6</sup> | 4.6 <sup>6</sup> |     |     | 71    |  |
| Xfer NOD - Sacramento River <sup>2</sup>  |     |     |     |     |     |     |     |     |     |     |                   |                   |                  |                  |     |     | 0     |  |
| Xfer NOD - San Joaquin River <sup>2</sup> |     |     |     |     |     |     |     |     |     |     |                   |                   |                  |                  |     |     | 0     |  |
| SOD CVP Surface/GW purchases              |     |     |     |     |     |     |     |     |     |     |                   |                   |                  |                  |     |     | 0     |  |
| Exchange of EWA assets                    |     |     |     |     |     |     |     |     |     |     |                   |                   |                  |                  |     |     | 0     |  |
| Groundwater pumping                       |     |     |     |     |     |     |     |     |     |     |                   |                   |                  |                  |     |     | 0     |  |
| Exchange from SWP to CVP in SL            |     |     |     |     |     |     |     |     |     |     |                   |                   |                  |                  |     |     | 0     |  |
| Total Monthly EWA Assets                  | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 44                | 22                | 1                | 5                | 0   | 0   | 71    |  |

| EWA Expenditures at the Export Pumps |     |     |     |     |                  |     |                   |                   |                   |     |     |     |     |     |     |     |       |
|--------------------------------------|-----|-----|-----|-----|------------------|-----|-------------------|-------------------|-------------------|-----|-----|-----|-----|-----|-----|-----|-------|
| 4                                    | C/O | Oct | Nov | Dec | Jan              | Feb | Mar               | Apr               | May               | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Total |
| SWP export cuts                      |     |     |     |     | -66 <sup>9</sup> |     | -38 <sup>13</sup> | -28 <sup>10</sup> | -79 <sup>10</sup> | -3  |     |     |     |     |     |     | -215  |
| CVP export cuts                      |     |     |     |     |                  |     |                   |                   | -69 <sup>11</sup> | -2  |     |     |     |     |     |     | -72   |
| Total Expenditures                   | 0   | 0   | 0   | 0   | -66              | 0   | -38               | -28               | -149              | -5  | 0   | 0   | 0   | 0   | 0   | 0   | -287  |

| EWA End-of-Month Incremental Storage Changes |     |     |     |     |     |     |     |     |      |     |     |     |     |     |     |     |       |
|--|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|-------|
| 5  | C/O | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May  | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Total |
| SWP in SL (without Source Shift)             | 7   | 30  | 34  | 12  | -66 | 76  | -47 | -59 | -79  | 43  | 25  | 32  | 3   | 0   | 0   | 0   | 11    |
| CVP in SL                                    | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | -69  | -2  | 44  | 22  | 1   | 5   | 0   | 0   | -1    |
| NOD Storage                                  | 45  | -19 | -26 | 0   | 0   | 0   | 0   | 0   | 0    | -3  | 7   | 1   | 19  | -4  | 0   | 0   | 20    |
| Groundwater SOD                              | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0    | 0   | 0   | 0   | 0   | 0   | 0   | 37  | 37    |
| Total Incremental Storage Changes            | 52  | 11  | 8   | 12  | -66 | 76  | -47 | -59 | -149 | 38  | 75  | 55  | 22  | 1   | 0   | 37  | 62    |

| EWA End-of-Month Storage Balance at Various Sites |     |     |     |     |     |     |     |     |      |      |     |     |     |     |     |      |  |
|---|-----|-----|-----|-----|-----|-----|-----|-----|------|------|-----|-----|-----|-----|-----|------|--|
| 6   | C/O | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May  | Jun  | Jul | Aug | Sep | Oct | Nov | Dec  |  |
| SWP in SL (without Source Shift)                  | 7   | 38  | 72  | 84  | 17  | 93  | 46  | -13 | -92  | -49  | -24 | 8   | 11  | 11  | 11  | 11   |  |
| CVP SL  | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | -69  | -72  | -28 | -6  | -6  | -1  | -1  | -1   |  |
| NOD Storage                                       | 45  | 26  | 0   | 0   | 0   | 0   | 0   | 0   | 0    | -3   | 4   | 5   | 24  | 20  | 20  | 20   |  |
| Groundwater SOD                                   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0   | 37   |  |
| EWA Asset Balance                                 | 52  | 64  | 72  | 84  | 17  | 93  | 46  | -13 | -162 | -124 | -49 | 6   | 29  | 30  | 30  | 62 * |  |

| San Luis Reservoir Storage Conditions            |     |     |     |      |      |      |      |      |      |     |     |     |     |     |     |     |  |
|--|-----|-----|-----|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|--|
| 7  | C/O | Oct | Nov | Dec  | Jan  | Feb  | Mar  | Apr  | May  | Jun | Jul | Aug | Sep | Oct | Nov | Dec |  |
| Total Storage (base case)                        |     | 707 | 884 | 1302 | 1790 | 1832 | 1982 | 1857 | 1565 | 995 | 699 | 642 | 683 | 715 | 780 | 947 |  |
| Encroachment                                     |     |     |     |      |      |      |      |      |      |     |     |     |     |     |     |     |  |
| Total Storage (EWA case)                         |     | 745 | 955 | 1386 | 1807 | 1925 | 2028 | 1844 | 1403 | 874 | 647 | 644 | 688 | 724 | 790 | 957 |  |
| MWD Source Shifting                              | 29  | -10 | -10 | -9   |      |      |      |      |      |     |     |     |     |     |     |     |  |
| Storage (with MWD source shifting) <sup>12</sup> |     | 764 | 964 | 1386 | 1807 | 1925 | 2028 | 1844 | 1403 | 874 | 647 | 644 | 688 | 724 | 790 | 957 |  |

<sup>0</sup> 2001 NOD Storage = 20(PCWA) + 25(MID). 2002 NOD Storage = 135(YCWA) + 10(SGA).

\* EWA backed up water into Lake Oroville between September 14 and 30, 2002 (which includes a 20% carriage water loss). SOD equivalent = 16 TAF (not a 1:1 Exchange).

Since EWA water was backed up into Lake Oroville, then the amount of available water south of the Delta is reduced.

<sup>1</sup> Aqueduct conveyance and evaporation losses are not included.

<sup>2</sup> Carriage water loss applies to water transfers from the Sacramento River; a 10% conveyance loss applies to water transfers from the San Joaquin River.

Carriage water losses applied to the 2001 water transfers are as follows: 15% for the YCWA and OWID transfers; and 25% for the PCWA transfer.

<sup>3</sup> 2001 PCWA Transfer (Joint place of use)

<sup>4</sup> 2001 MID Transfer (Joint place of use)

<sup>5</sup> SOD 2001 SWP post lowpoint deliveries = 15(Semiotropic/Tulare ID) + 5(Cawelo) + 12(Santa Clara)

<sup>6</sup> 2002 YCWA Transfer (Joint place of use)

<sup>7</sup> 2002 KCWA Transfer (SWP place of use)

<sup>8</sup> SGA Transfer (CVP place of use)

<sup>9</sup> A total of 66 TAF has been expended for the 1/5-1/9 curtailment.

<sup>10</sup> Approximately 45 TAF has been expended for 2002 VAMP (28 TAF in April and 17 TAF in May) for the SWP.

<sup>11</sup> Approximately 69 TAF has been expended for 2002 VAMP shoulders for the CVP.

<sup>12</sup> SWP-based upon the 10/1/02 DWR's 90% (90% Fall) EWA allocation study

<sup>13</sup> Conversion from EWA to Project water since San Luis Reservoir was physically full.

<sup>14</sup> A 2:1 exchange program between the SWC and EWA beginning 3/30/02 and ending 4/8/02.